R E P O R T R E S U M E S

ED 015 551 24 EA 001 032

AN ANALYSIS OF THE POSITION OF RESEARCH DIRECTOR IN THE PUBLIC SCHOOL SYSTEMS THROUGHOUT THE FIFTY STATES. SUMMARY REPORT.

BY- SHAW, ALVIE L.
DENVER UNIV., COLO.

REPORT NUMBER BR-6-8487-SUMM PUB DATE AUG 67
CONTRACT OEC-4-7-068487-0147
EDRS PRICE MF-$0.25 HC-$1.00 23P.

DESCRIPTORS- SCHOOL DISTRICTS, *PUBLIC SCHOOL SYSTEMS, *RESEARCH DIRECTORS, *ADMINISTRATOR QUALIFICATIONS, *OCCUPATIONAL INFORMATION, LITERATURE REVIEWS, CREDENTIALS, *EDUCATIONAL RESEARCHERS, SCHOOL SUPERINTENDENTS, ADMINISTRATOR RESPONSIBILITY, FEDERAL AID, BEHAVIORAL SCIENCES, DECISION MAKING, RESEARCH APPRENTICESHIPS, ADMINISTRATOR BACKGROUND, DENVER.

THIS STUDY'S PURPOSE WAS TO DETERMINE (1) THE REQUIREMENTS FOR THE POSITION OF RESEARCH DIRECTOR IN PUBLIC SCHOOL SYSTEMS IN THE FIFTY STATES, (2) DISTINGUISHING CHARACTERISTICS OF THE RESEARCH DIRECTOR'S POSITION, AND (3) THE NATURE OF THE RESEARCH DIRECTOR'S JOB. A REVIEW OF THE LITERATURE PROVIDED THE BASIS FOR THE CONSTRUCTION OF A QUESTIONNAIRE SENT TO 214 SCHOOL DISTRICTS WITH STUDENT ENROLLMENTS OF MORE THAN 12,000. ONE HUNDRED SIXTY-EIGHT USABLE RESPONSES WERE RECEIVED. SOME OF THE MORE NOTABLE FINDINGS INCLUDED--(1) THE MASTER'S DEGREE WAS THE MOST COMMON DEGREE REQUIREMENT, (2) A HIGH PERCENTAGE OF SCHOOL DISTRICTS DID NOT HAVE MAJOR OR MINOR FIELD REQUIREMENTS, (3) THE SUPERINTENDENT OF SCHOOLS WAS THE IMMEDIATE SUPERVISOR OF THE RESEARCH DIRECTOR IN 56.5 PERCENT OF THE SCHOOL DISTRICTS, (4) THE RESEARCH DIRECTOR DIRECTLY SUPERVISED PERSONNEL IN 80.9 PERCENT OF THE DISTRICTS, AND (5) THE MAJOR AREAS OF RESPONSIBILITY OF THE RESEARCH DIRECTOR WERE IN THE AREAS OF EVALUATION OF EXPERIMENTAL PROGRAMS, SURVEYS, REPORTS, EVALUATION OF PROJECTS FUNDED BY THE FEDERAL GOVERNMENT, CONSULTANT SERVICES, AND TESTING. FROM THE LITERATURE REVIEW, FINDINGS, AND STUDY CONCLUSIONS, RECOMMENDATIONS WERE MADE CONCERNING THE POSITION OF THE PUBLIC SCHOOL RESEARCH DIRECTOR. (HW)

ED015551

/

SUMMARY REPORT
BR Project No. 6-8487
Grant No. OEC-4-7-068487-0147

P 4 2 4

AN ANALYSIS OF THE POSITION OF RESEARCH DIRECTOR IN THE PUBLIC SCHOOL SYSTEMS THROUGHOUT THE FIFTY STATES

August 1967

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

EA 001 052

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

AN ANALYSIS OF THE POSITION OF RESEARCH DIRECTOR IN THE PUBLIC SCHOOL SYSTEMS THROUGHOUT THE FIFTY STATES

by
Alvie L. Shaw

August 1967

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorhip are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

University of Denver
Denver, Colorado

TABLE OF CONTENTS

SECTION		PAGE
I.	SUMMARY REPORT	1
	Background	1
	Objectives	2
	Procedure	3
	Review of Literature	5
	Findings	10
	Requirements	10
	Distinguishing Characteristics	12
	Functions	14
	Conclusions	15
	Recommendations	19
	Bibliography	20

BACKGROUND

Administration as a profession has been developing in public schools since the appointment of the first superintendent of schools in the year 1837. Administrative positions have continued to expand and now include a wide variety of titles, assignments, and responsibilities. It was necessary for school districts to appoint intermediary central-office administrators with varying responsibilities when increased demands and responsibilities expanded beyond the capabilities and abilities of the school superintendent. These intermediary central-office administrators were assigned special responsibilities and functions and usually served on a district-wide basis between the superintendent and the building principals.

These positions, quite often, were established in order to meet a particular need of a local school system. One of the particular needs recognized by school authorities was in the area of research activities. The titles associated with these administrative positions were assistant superintendent, administrative assistants, directors, supervisors, and coordinators. Historically, these positions were often established with little advance planning. The administrative titles of these personnel did not fully or accurately describe either their status within the administrative organization or their specific responsibilities within the administrative organization. The responsibilities assigned were often made in a variety of unrelated areas such as directors of research and personnel.

As districts gained experience in staff organization and as similar needs were identified the staffing patterns began to be more

effective. Gradually responsibilities grouped logically under certain positions. This in turn brought about new concepts and definitions for the administrative positions. One of these emerging positions was the administrative head of the department or division of research, usually identified as the director of research.

OBJECTIVES

The purpose of the study was to determine (1) the requirements for the positions of research director in public school systems in the fifty states, (2) to analyze and compare those factors of the research director's positions which distinguish it from other positions in the school hierarchy, (3) to determine the nature of the research director's job in relation to the function which it performs for the school system. Criteria or yardsticks would be developed, where possible, to determine the needed qualifications, relative importance, and the characteristics and functions of the research director.

The problem was divided into sub-problems under each of the major categories. The major categories and their sub divisions were:

The requirements for the position of research director. The purpose was to determine the requirements for the position and whether the research director must meet state requirements for certification. The study sought to determine the experience requirements, which included an internship and teaching experience. The required educational background was to be determined. This included the amount of educational background required in the behavioral sciences and in scientific research methodology and design.

Distinguishing characteristics. The study was designed to determine the relative position of the research director in the organizational structure of the school system. This included an analysis of lines of communication, authority and responsibilities of the position, and, finally, the determination of whether the research director functions as line or staff in the administrative organization.

The functions of the research director's position within the school system. The study was designed to determine the main functions of the position of the research director.

Criteria and values. Criteria and values would be established, where possible, to determine the necessary qualifications, relative importance, characteristics, and functions of the research director.

PROCEDURE

The questionnaire method was selected as the most feasible means of collecting the data in this research project. The questionnaire sought data related to the educational and experiential requirements for the position of research director. Data pertaining to the type of educational background of the research director was also sought through the use of the questionnaire. Further, data was collected to determine the relative position of the research director in the school systems' hierarchy. Also, the particular functions of the research director as they relate to the school system was obtained.

Sample. A stratified sample was used. School districts throughout the fifty states were stratified according to enrollment into four

strata. School districts of under 12,000 pupils were not included because the literature indicated that few districts below this size would have a full-time director of research within the central administrative organization.

All school districts within each stratum were contacted to determine whether they qualified for participation. All districts identified as having an administrator in charge of research were accepted as qualified participants in the study. Those districts identified as meeting the established qualifications were asked to participate in the study.

Development of the questionnaire. A review of the literature provided information and background for the formulation of the questionnaire which was designed to obtain the expressed information with specific reference to the position of the director of research.

A tentative draft of the questionnaire intended as the data gathering instrument for this survey was presented to five doctoral students and two members of the faculty of the School of Education, University of Denver, to determine the efficacy of the instrument as a means of gathering the desired data. These doctoral students and faculty members were asked to evaluate the questionnaire and to suggest changes or additions. The questionnaire was revised in light of the suggestions and criticisms received from these persons. The questionnaire was then submitted to the Internal Clearance Committee, Research Bureau, United States Office of Education for their evaluation of the instrument. The Bureau of Research, United States Office of Education approved the questionnaire without revisions on January 26, 1967.

REVIEW OF LITERATURE

The chronological placement of the beginning of the establishment of bureaus or departments of research within the administrative organization of local school districts may be traced to the early use of statistical methods and the advent of tests to measure achievement and intelligence. This test and measurement movement began in the United States at about the year 1904. The development of the movement was quite rapid from the early 1900's to 1930.

The use of the school survey was initiated in 1905 by Strayer and Elliot. The school survey movement became well established by the year 1911 and continued to flourish from 1912 to 1924. Apparently there were two chief causes, one economic and the other scientific, for the rapid growth of the survey movement. The chief factor of the economic influence was due to the public making inquiries concerning expenditures and to know for "what" and "why" these expenditures were being made. The scientific influences, on the other hand, had to do with the desire of educators to subject the objectives, curriculum, organization, and management of the schools to critical analysis.

The school survey movement led to the establishment of bureaus of research in city school systems. The reports of the survey investigations pointed out the desirability of continued study in the various areas of school management and operation. The first bureaus of research were established in New York City and Baltimore in 1913. The total number of bureaus increased from 10 by the end of 1914 to 260 in 1937.

Prior to World War II three studies dealing with the functions of public school research bureaus and with experience and training of

directors of research were identified. These studies were conducted between the years of 1926 and 1933.

The 1926 study identified 65 school systems having a bureau of research. Forty-four of the bureaus reported employing a director with a degree. One-sixth of those reporting held the Ph.D. degree; one-half held the M.A. degree; one-fourth held the B.A. degree; one-twelfth reported having a director without a degree.

The 1926 study identified 41 different activities being carried on by the public school research bureaus. The activities more generally engaged in by bureaus were testing, student classification, curricular studies, surveys, administrative services and problems, and publicity service.

A study conducted in the mid 1930's of cities having a population of 100,000 and over identified 52 such cities with bureaus of research. The study revealed that most of the requests for service from the bureaus came from the superintendent of schools. Approximately fifty per cent of the bureaus reported teachers as a source of requests. Twenty-five different areas were identified as functions of the various bureaus.

Preparation of reports, testing, classification of students, record keeping, surveys, finance and budget studies, curriculum revisions and construction, and publicity were the areas of responsibility most often mentioned. The study further revealed that of the 51 reporting, 22 held the doctorate degree; 23 the master's degree; 5 the baccalaureate degree; and one did not indicate his academic training.

The 1930 study identified 122 directors of research. Sixty of the 122 participated in the study. The report of this study revealed

that a majority of the directors had the assistance of full-time professional help. More than half of the directors had previous experience as a teacher and as a principal. The study further indicated that the areas receiving major attention were nearly equally divided between administrative areas and instructional areas. The administrative areas receiving the major attention included (1) financial studies, child-accounting, teaching staff studies, publicity, reports, and building program and organizational studies. The instructional areas receiving the major attention included (1) testing, (2) curriculum, (3) teaching methods.

The post World War II era was characterized by continued growth in number of research units established within the local school organization. There was also an increased emphasis on research activities due to the influence of other agencies. Agencies contributing to this increased emphasis consisted of colleges and universities, laboratories, research bureaus, governmental agencies, state departments of education, professional organizations, and foundations. These agencies supplied pertinent research data which served to stimulate and provide guidance for the public school research personnel.

The scope of the activities of the local research departments continued to include responsibilities in the area of tests and measurements, surveys, publicity, student accounting, guidance, and curriculum. However, there appeared to be a greater priority placed on experimental studies in curriculum, teaching methods, and organization than on the routine surveys, publicity, guidance, and the compilation of various administrative data.

This period was also marked by a greater involvement of personnel within the district and a more centralized research agency within the school organizational structure. The primary purposes of this organizational structure was to provide for a more effective central coordinating agency and to provide appropriate channels for stimulating, aiding and correlating the research activities of the personnel within a given school system.

Many local school research departments were being categorized as a department or division within the administrative organization. The development of research departments within the administrative organization led to the appointment of someone delegated the administrative responsibilities for the operation of the department. The administrative title of "director" was usually given the person holding the position. However, a number of department heads held the title of administrative assistant, assistant or associate superintendent, or coordinator. In most cases, the administrative head of the department reported directly to the superintendent. The literature revealed that in 1965, the degree requirements for the head of the research unit showed 36 per cent required the doctorate; 44 per cent required the master's; and 20 per cent had no degree requirements.

The number of staff members within a local research unit was basically determined by the size of the school system and on the responsibilities assigned to the unit. The units having the smaller staffs were those which spent a greater amount of time in actual research rather than devoting considerable time to testing, psychological services, and other activities which would require additional personnel. The literature

disclosed that personnel within the research department were beginning to have responsibilities in the areas of data processing.

Recent literature indicated that research departments quite often received requests from outside agencies and individuals for information and for the privilege of conducting experimental studies within the local district. The decision as to whether to approve or disapprove the requests from outside agencies was usually made by the research personnel after consultation with their immediate supervisor or with those personnel in the district who would be personally involved in the activity requested. It was revealed that requests made by colleges and universities as well as requests by members of the staff of the system were those most often honored.

The influence of the federal government, particularly through the U.S. Office of Education, became apparent shortly after the passage of the Cooperative Research Act in 1954. The literature further revealed that the influence of the U.S. Office of Education grew with the passage of the National Defense Education Act of 1958 and the more recent 1965 passage of the Elementary Secondary Education Act. It was predicted that this influence will continue and will bring about changes in research methods as well as the scope of research.

The literature revealed that there is now a shortage of qualified researchers and that this shortage is apt to become greater during the next five to ten years. The literature also suggested that the educational training programs for researchers will also change. The suggested changes included a longer period of preparation, more sophisticated experiences, and a closer relationship with other related disciplines. The

literature further recommended that a concerted effort be made to recruit researchers and provide financial support for their training.

FINDINGS

This section presents a summary of the data derived from the questionnaire relative to the position of the public school research director. The questionnaire was designed to ascertain the status of the public school research director relative to (1) requirements for the position, (2) distinguishing characteristics of the position, and (3) the function of the research director.

The questionnaire was sent to a stratified sample of school districts throughout the fifty states of the United States. School districts having a student enrollment of 12,000 plus pupils and employing a director of research qualified as a participant in the study. The instrument was sent to 214 school districts identified as being qualified to participate.

A total of 168 usable questionnaires were returned. The questionnaire utilized in this study represented 78.5 per cent of the originally selected school districts. Eight of the original 214 school districts selected to participate in the study returned the questionnaire unanswered. These eight school districts also submitted a letter indicating the reason they were unable to participate. The reason given, in all instances, was that they did not presently employ a research director.

Summary of requirements. The degree most commonly required of the public school research director was the master's. Many, however, required the doctorate. Few school districts had the bachelor's degree as the minimum requirement for the position.

Despite the literature advocating the importance of training and competence for researchers, a high percentage of school districts do not have major or minor field requirements. Educational administration, research, and psychology were the major fields most often mentioned by those having a major field requirement. Educational administration and psychology were the minor field requirements most often mentioned.

Specific courses in research and statistics were required in approximately 50 per cent of the positions reporting. The courses most often mentioned were (1) Introduction to Research Methods, (2) Introduction to Educational Measurement, and (3) Introduction to Statistics. Nearly one half of the districts reporting did not have specific course requirements for the research positions.

Over five per cent of those reporting indicated the desirability of requiring more advanced courses in research and statistics. The more advanced courses included (1) Advanced Statistics, (2) Advanced Research Methods and Design, (3) Analysis of Variance and Co-variance, (4) Multiple Correlation and Regression, (5) Factor Analysis, and (6) Survey Sampling.

The majority of the districts reporting (73.8 per cent) did not require courses in the behavioral sciences. The behavioral science requirement most often mentioned by those reporting a requirement was in the area of psychology. Educational psychology was a requirement for the position in 19.0 per cent of the districts reporting.

Few school districts identified specific course requirements desirable in the behavioral sciences. Educational psychology (19.0 per cent) and sociology (12.5 per cent) were the two areas most often mentioned as being desirable academic areas.

Experience as a teacher was required by 52.4 per cent of the districts reporting. Less than 5.0 per cent of the districts required experience in research. Nearly 20.0 per cent required central office administrative experience. There were no experience requirements listed in 35.7 per cent of the districts reporting.

There were no certification requirements in 38.1 per cent of the districts reporting. The administration credential was required by 37.5 per cent of the districts, while state teacher certification was required in 20.8 per cent of the districts. Serving an internship was not a requirement for the position in a majority of the districts. It was reported that 91.7 per cent of the districts did not require an internship.

Over one half (60 per cent) of the districts indicated no anticipated significant changes in the educational and experiential requirements for the position. The remaining 40 per cent identified anticipated changes such as (1) higher degree requirements, (2) special certification, (3) training in data processing, (4) more required courses in research and statistics, and (5) administrative experience.

Summary of distinguishing characteristics. The superintendent of schools was the immediate supervisor of the director of research in 56.5 per cent of the school districts reporting. The director of research reported to an assistant superintendent in 28.6 per cent of the cases reported.

Results of the study showed the position of research director comparable to other directors such as director of personnel, in nearly 50 per cent of the school districts reporting. A number of school

districts (18) reported the position comparable to that of assistant superintendent.

The director of research directly supervised personnel in 80.9 per cent of the districts reporting. Over 50 per cent of the research directors supervised staff identified as clerical. Professional research staff supervised by the research director included research assistants and research supervisors. A total of 73 research directors supervised research personnel classified as research assistants or research supervisors. Ten of the 13 school districts in strata one reported supervising research assistants; nine school districts in strata one reported supervising research supervisors. Less than five per cent of the research directors supervised personnel such as nurses, audio visual, and public relations personnel. Data processing personnel were supervised by 14.9 per cent of the research directors.

Fifteen areas of responsibility considered to be outside the area of research by the research director were identified through the results of the questionnaire. The areas of responsibility outside of research most frequently mentioned were testing and curriculum development. Proposal writing and public relations were mentioned by approximately ten per cent of those reporting, as responsibilities outside the area of research.

The study identified more than 75 per cent of the directors of research functioned as staff officers in the administrative organization. It was not possible to identify nine of the positions as either "line" or "staff."

The study identified 15 different sources of research requests.

The majority of requests came from three sources: (1) the superintendent and/or his cabinet, (2) principals, and (3) teachers. Less than ten per cent of the requests came from state and county offices, chambers of commerce, city officials, building and finance departments, foundations, and the United States Office of Education. The study showed 119 school districts spent less than 50 per cent of their time on projects which were requested outside of the research department.

Nearly 50 per cent of the school districts reported no job descriptions for the position. Ninety school districts reported having job descriptions for the position of which 33 reported the job description as not being written by either the research department or by the superintendent of schools.

More than one half (53.6 per cent) of the research directors were employed for a 12 month period. Vacation time for those employed for 12 months ranged from two weeks to four weeks with nearly 50 per cent receiving two weeks vacation. Few directors (5.4 per cent) were contracted for less than 11 months. Those contracted for 11 months received four weeks vacation time.

Summary of functions of the research director. The major areas of responsibility of the research director were in the areas of evaluation of experimental programs, surveys, reports, evaluation of projects funded by the federal government, consultant services and testing. Public information and data processing were seldom identified as major functions.

Minor functions of the research director included 17 different areas of responsibility. Committee assignments, consultant services, departmental surveys, writing proposals, and designing and implementing

programs were frequently mentioned as minor functions. Data processing and evaluation of experimental programs were the areas of responsibility identified as minor functions by the least number of participants in the study.

Approximately 50 per cent of the research directors were not responsible for student and personnel accounting or budget and bond issue planning. The writing of federal proposals and the supervision of programs funded by the federal government was not a responsibility of nearly one third of the research directors.

Responsibilities of the research director have undergone change in a majority of the districts where the position has been in existence for more than a year. Federal projects, data processing, the use of more sophisticated research techniques, and an increase in number of projects to evaluate were responsible for the the greatest number of changes in the responsibilities of the research director.

More than 50 per cent of the districts identified changes which they anticipated in the near future. These changes, in the main, included an increase in professional staff, more sophisticated research, automatic data processing, and a change in the administrative organization.

CONCLUSIONS

Conclusions relative to the requirements distinguishing characteristics, and functions of the public school research director were drawn from the literature and thr results of the questionnaire. Conclusions were also drawn from organizational charts and job descriptions.

On the basis of the data presented in this investigation the

following conclusions appear warranted:

1. The historical development of the position of research director has developed from first being established more frequently in smaller school districts.
2. The scope of responsibilities assigned to research bureaus has in the past and continues (although at a somewhat lesser degree) to encompass a wide variety of functions. Many of the functions are considered to be outside the realm of what is generally considered to be pure research.
3. Federal aid to education has had and will continue to influence the growth and activities of the position of the public school research director.
4. Within recent years the public schools have experienced a shortage of qualified personnel to staff the position. This shortage of qualified personnel is likely to continue for the next five to ten years.
5. School districts require a college degree for the position. The research director is usually required to hold at least a master's degree and frequently holds a doctorate. Larger school districts have higher degree requirements than the smaller districts.
6. Major and minor academic field requirements are seldom required as a prerequisite for the position.
7. Many school districts do not have specific course requirements in research and statistics. Those districts which do

require specific courses in research and statistics seldom go beyond the introductory courses. A need for more advanced courses in research and statistics is expressed by many school districts.

8. Specific courses in the behavioral sciences are not, for the most part, required for the position. The need for requiring specific courses in the behavioral sciences is not evidenced by the study.
9. Previous experience is usually required for the position. Experience as a teacher and/or administrator is a common requirement. Experience in research is seldom required.
10. Special research certification is not required for the position. The administrative or teacher's certificate usually suffices as certification for the position.
11. The serving of an internship is not a required prerequisite for the position.
12. Future changes in educational and experiential requirements for the position will occur. These changes may include requirements for more advanced degrees, more administrative and research experience, special certification requirements, and additional course requirements in research and statistics.
13. The immediate supervisor of the research director, in most cases, is the superintendent of schools. However, the immediate supervisor of research directors in large city school systems is often an assistant superintendent or deputy superintendent.

14. The position of research director is comparable to that of other directors or to an assistant superintendent within the school hierarchy.
15. Research directors directly supervise both professional and classified personnel. It is more common for the research director in the larger school districts to supervise research assistants and research supervisors. Some research directors supervise professional staff members who are considered to be personnel not directly related to research activities.
16. It is not uncommon for research directors to have responsibilities other than those concerned with research.
17. Research directors predominately serve as staff officers within the administrative organization. However, the director may on occasion exercise line authority.
18. The sources of research requests come from a variety of sources, but predominately from the professional staff within the district.
19. The major decisions concerning research are seldom made by research personnel alone. However, research personnel nearly always participate in the decision-making process.
20. Job descriptions for the position are either non-existent or more often than not inadequate.
21. Research directors are contracted for at least ten months with a minimum of two weeks vacation.
22. Responsibilities of the research director have undergone some change within the past three years. The evidence further

indicated changes will continue to occur in the areas of job requirements and functions.

RECOMMENDATIONS

From the review of literature, findings, and conclusions resulting from the present study, recommendations were made concerning the position of the public school research director.

In view of the findings and the conclusions drawn, the recommendations being submitted are:

1. There be a concerted effort on the part of all agencies and institutions concerned with educational research to recruit and train candidates in the area of educational research.
2. Efforts should be made to provide financial assistance in the form of scholarships and grants to individuals interested in educational research training programs.
3. In-service training programs should be provided by districts as needs are identified.
4. Requirements for the position, both educational and experiential, should be commensurate with the assigned functions to be performed.
5. Job descriptions should be written in those school districts where they do not now exist. The job descriptions should periodically be reviewed and revised for the purpose of insuring accuracy and completeness.
6. The responsibilities of the research director which are

considered to be non-research functions should be eliminated as soon as feasible.

7. Further study be made on the effect of federally funded programs on research activities in local public school districts.
8. Further study be made to determine an organizational structure which would contribute to an effective research department.
9. Further study be made on staff assistance for the research director; how many and what kinds of certificated and classified staff members are needed for research departments in different sized school districts; how research department staffs should be organized to efficiently and effectively perform the function of the department.

BIBLIOGRAPHY

There are 33 references listed in the final report.